

**BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA**

DOCKET NO. 2021-3-E

In the Matter of:)	
)	
Annual Review of Base Rates)	SUPPLEMENTAL DIRECT
for Fuel Costs for)	TESTIMONY OF BRETT PHIPPS
Duke Energy Carolinas, LLC, Increasing)	FOR DUKE ENERGY
Residential and Non-Residential Rates)	CAROLINAS, LLC
)	

1 **Q. PLEASE STATE YOUR NAME, TITLE AND BUSINESS ADDRESS.**

2 A. My name is Brett Phipps and I am Managing Director, Fuel Procurement, for Duke Energy
3 Corporation. My business address is 526 South Church Street, Charlotte, North Carolina
4 28202.

5 **Q. DID YOU PREVIOUSLY FILE DIRECT TESTIMONY IN THIS DOCKET?**

6 A. Yes, I did.

7 **Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL DIRECT TESTIMONY?**

8 A. The purpose of my supplemental direct testimony is to update projected coal and natural
9 gas burns and costs for the billing period based on the July 2021 fuels forecast, and to
10 update the Commission on the latest trends in coal and natural gas market conditions in
11 support of the updated fuel costs Duke Energy Carolinas, LLC (“DEC”) expects in the
12 estimated and forecasted periods for the period June 1, 2021 through September 30, 2022.

13 **Q. PLEASE DESCRIBE THE CHANGES IN NATURAL GAS AND COAL MARKET**
14 **CONDITIONS IMPACTING THE JULY FORECAST.**

15 A. Natural gas prices are dynamic, volatile and can change significantly based on market
16 fundamental drivers including supply, demand and projected storage inventory balances.
17 Since the April 2021 forecast—which was used to develop the July 30, 2021 fuel filing—
18 there continues to be sustained upward pressure on natural gas prices due to: 1) stable
19 production; 2) lower projected storage inventory balances going into winter 2021/2022; 3)
20 strong growth in liquefied natural gas exports; and 4) increasing consumption in non-power
21 generation sectors as the economy continues to recover from the COVID-19
22 pandemic. Coal supply markets are seeing similar upward pressure on supply prices due
23 to increasing electric generation demand as a result of rising natural gas prices as well as

1 strong export demand while production levels remain constrained due to supplier financial
2 conditions and reduced access to capital.

3 **Q. WHAT ARE THE UPDATED PROJECTED COAL AND NATURAL GAS BURNS**
4 **AND COSTS FOR THE BILLING PERIOD?**

5 A. As of the July 2021 fuels forecast DEC's coal burn projection for the billing period
6 increased to 5.5 million tons compared to the April 2021 forecast of 4.4 million tons.
7 DEC's billing period projections for coal generation will continue be impacted due to
8 changes from, but not limited to, the following factors: (1) delivered natural gas prices
9 versus the average delivered cost of coal; (2) volatile purchased power prices; and (3)
10 electric demand. Combining coal and transportation costs, the projected average delivered
11 coal costs since April 2021 have increased from approximately \$69.94 per ton to \$76.61
12 per ton for the billing period. This includes an average total projected transportation cost
13 of \$30.76 per ton for the billing period, compared to \$28.72 per ton from the April forecast.
14 The change in the delivered coal costs is primarily driven by increasing coal supply costs
15 related to the remaining open position in the billing period. The rail transportation rates
16 included in the costs reflect the rates which became effective July 1, 2021 for both Norfolk
17 Southern and CSX railroads.

18 The projected average delivered coal cost, however, remains subject to change
19 based on, but not limited to, the following factors: (1) exposure to market prices and their
20 impact on open coal positions; (2) the amount of non-Central Appalachian coal DEC is
21 able to consume; (3) performance of contract deliveries by suppliers and railroads, which
22 may not occur despite DEC's strong contract compliance monitoring process; (4) changes

1 in transportation rates; and (5) potential additional costs associated with suppliers'
2 compliance with legal and statutory changes.

3 DEC's natural gas burn projection for the billing period has decreased from 215.6
4 million MBtu to 203.0 million MBtu in the July 2021 forecast. DEC's overall natural gas
5 burn projections for the billing period remain driven by the inclusion of natural gas
6 generation at Belews Creek and Marshall Units 3 & 4 as a result of the dual fuel
7 conversions being commercially available over the course of the billing period, combined
8 with increased generation output from the Lincoln CT project. The average forward Henry
9 Hub price for the billing period from the July 2021 forecast is \$3.41 per million MBtu,
10 compared to \$2.75 per million MBtu from the April 2021 forecast. Projected burn volumes
11 will continue to vary based on factors such as, but not limited to, changes in commodity
12 prices and weather driven demand.

13 **Q. DOES THIS CONCLUDE YOUR SUPPLEMENTAL TESTIMONY?**

14 **A.** Yes, it does.